

REMARKS

1. Prior Art Issues

1.1. Claims 6, 7 and 27 stand rejected as anticipated by Mat-Jan in light of evidence by Hugenholtz. This rejection is moot as claim 6 has been amended to incorporate the limitation of former claim 8, which was not so rejected. Note that Mat-Jan only discloses E. coli, which is not presently claimed.

1.2. Claims 6-10 and 27 stand rejected as anticipated by Hugenholtz or Starrenburg in light of evidence by ATCC catalog.

Claim 6, as amended, is directed to a Pfl-defective mutant of Lactococcus, Lactobacillus, Pediococcus, Streptococcus, or Bifidobacterium, with certain functional characteristics. Hugenholtz and Starrenburg only refer to mutants of Leuconostoc..

The Examiner argues that certain Leuconostoc species are within the scope of claims 8-10 because Leuconostoc bacteria have been frequently cross-identified with and/or reclassified into the claimed genera, citing ATCC catalogue (19th ed. 1996) pages 68, 199, 205, 264 and 346.

Three of the cited pages (68, 199, 346) only evidence cross-identification or reclassification among the genera already recited in claims 8-10, and hence do not support admission of Leuconostoc as an equivalent to them. Thus, the Examiner's position rests solely on (1) page 205, listing ATCC 15520, a strain initially identified by K. Kitahara as Lactobacillus batatas, and listed in the ATCC catalog as Leuconostoc lactis, and (2) page 264, listing ATCC 8042, a strain initially identified as Leuconostoc mesenteroides, and now listed in the ATCC catalog as Pediococcus acidilactici.

The Examiner assumes that Lactobacillus batatas was renamed as Leuconostoc lactis, and Leuconostoc mesenteroides as Pediococcus acidilactici, i.e., there was a nomenclature change.

We believe that all this proves is that the original depositor mis-identified the strain.

If the Examiner wishes to establish that some Leuconostoc were reclassified as Pediococcus, or that some Lactococcus were reclassified as Leuconostoc, then she should be citing the relevant taxonomic literature.

Moreover, the timing of reclassification is significant. The original application of this family was 08/701,459, filed in August 22, 1996. Thus, it is the scope of Lactobacillus and Pediococcus as of August 22, 1996 which we must address in interpreting the claims. In interpreting the teaching of Hugenholtz (1993) and Starrenburg (1991), it is the scope of Leuconostoc in 1993 and 1991, respectively, which is relevant, because the skilled person in 1996 would be aware of the taxonomic changes.

Also, we believe that even if some Leuconostoc strains were timely reclassified as strains of the recited species between 1993 and 1996, that doesn't necessarily render Hugenholtz or Starrenburg anticipatory.

Hugenholtz only refers to Leuconostoc in general and that genus has never changed its name. Starrenburg's teachings were directed to Leuconostoc mesenteroides strain 7-1, and Leuconostoc sp. 60. According to an October 6, 2005 email from Dr. Hugenholtz to Jan Skouv, copy enclosed, Leuconostoc sp. 60 has been confirmed by 16S-RNA sequencing to be a Leuconostoc lactis, thus not one of the species of amended claim 6.

While one strain initially identified as Leuconostoc mesenteroides is now listed by ATCC as Pediococcus acidilacti, that does not establish that Starrenburg misidentified his strain 7-1, or that it has since been reclassified. Is his strain listed in the ATCC catalog, and, if so, as what?

Starrenburg does not describe the characteristics of Leuconostoc mesenteroides strain 7-1 (p. 3535) in Table 1, so there is no reason to believe that even if it has been reclassified as Pediococcus, that it satisfies clauses (i)-(v)

of claim 6. The PTO can shift the burden of proof to Applicants only after it has established a prima facie for believing that a particular functionality is possessed by the prior art entity. Since Pediococcus have not been shown to generally satisfy clauses (i)-(v), that condition is not satisfied.

As to "Leuconostoc sp. 60", no evidence has been adduced that it belongs to a species which has been reclassified as Pediococcus. Indeed, the email from Hugenholtz proves otherwise.

2. Enablement/Deposit Issue

To overcome the rejection, counsel hereby declares that L. lactis strains DN 221 (DSM 11034) and DN 227 (DSM 11040) were deposited in DSM under the Budapest Treaty, and all depositor restrictions on public availability will be irrevocably removed upon issuance of a U.S. patent.

Enclosed herewith are copies of the deposit receipts for DN220-227 (DSM 11033-40).

3. Definiteness Issues

3.1. The term "providing" is ubiquitous in U.S. claims, appearing in at least one claim of 607,776 1976+ U.S. patents. It is generally used to indicate a starting material in a method. Thus, the claim does not speak to how that starting material was provided.

3.2. The distinction between a "providing" step and a "selecting" step relates to what actions are necessary for infringement. To infringe former claim 1, the infringer must have made the selection as recited in "selecting" step (ii). However, in claim 6, even though the strain "provided" in step (i) may have arisen through selection, it is not necessary that the accused infringer have performed that selection. Buying the strain of (i) would be "providing" it.

3.3. The examiner questions the definiteness of "reduced"

and "increased". The art is clearly capable of measuring growth rates (see Fig. 4a) and metabolic production (see Figs. 2, 3, 4b, 4c) under different conditions (wild-type vs. mutant, aerobic vs. anaerobic). It therefore can straightforwardly determine whether one of these parameters changes as a result of a change in conditions.

3.4. The Examiner criticizes the term "essentially". Use of this term was upheld as proper in In re Marosi 218 USPQ 289 (Fed. Cir. 1983).

The first issue is whether an adequate standard is provided for whether the anaerobic growth rate is essentially the same as the aerobic growth rate (in M17 medium), per condition (i).

According to P31, strains DN224, DN225 and DN226 had acceptable growth characteristics, while DN221, DN222, and DN223 had "severe growth defects under anaerobic conditions". Hence, "essentially the same" includes the relative growth patterns of DN224-226, and excludes that of DN221-223, see Fig. 4a. Together, page 31 and Fig. 4a provide the "standard".

The term "essentially" also appears in clause (iii), which recites "essentially no production of formate" under anaerobic conditions. The ethanol production of CHCC373, DN221, DN223, and DN224, is set forth in table 4.3 on page 33. CHCC373 production is 0.88-0.93mM (anaerobic). The production for applicants' strains is as follows:

DN221	0.36, 0.35
DN223	0.01, 0.01
DN224	13.19, 13.83.

The specification, P34, comments that DN224 has lost the defect in Pfl, as indicated by increased ethanol production so, we may assume that "essentially no" means less than the levels produced by DN224, and includes the levels produced by DN221 and 223.

4. Miscellaneous

Claim 6 has also been amended to specify that the wild type lactic acid bacterium has a functional Pfl gene, although that may be implicit in the functional limitation of clause (1). This amendment is not responsive to a rejection.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant

By:


Iver P. Cooper
Reg. No. 28,005

Enclosure

- deposit receipts for DN220-227
- email from Hugenholz

624 Ninth Street, N.W.
Washington, D.C. 20001
Telephone: (202) 628-5197
Facsimile: (202) 737-3528
IPC:lms
G:\ipc\n-q\Plou\NILSSON6B\pto amend.wpd



DSMZ Mascheroder Weg 1b D-38124 Braunschweig

Chr. Hansen A/S
10-12 Boge Allé

DK-2970 Horsholm

BRIEFNOTE

Ihr Zeichen / Your ref.

Unser Zeichen / Our ref.

Tel.

Datum/Date

05 31 / 26 16

254

1996-07-01

P213 96/H

Re.: Deposit of microorganisms according to the Budapest Treaty

Enclosed please find our Receipt and Viability Statements for the strains

<u>Lactococcus</u> <u>lactis</u> ssp. <u>diacetylactis</u> DN227	DSM 11040
<u>Lactococcus</u> <u>lactis</u> ssp. <u>lactis</u> DN226	DSM 11039
<u>Lactococcus</u> <u>lactis</u> ssp. <u>lactis</u> DN225	DSM 11038
<u>Lactococcus</u> <u>lactis</u> ssp. <u>lactis</u> DN224	DSM 11037
<u>Lactococcus</u> <u>lactis</u> ssp. <u>lactis</u> DN223	DSM 11036
<u>Lactococcus</u> <u>lactis</u> ssp. <u>lactis</u> DN222	DSM 11035
<u>Lactococcus</u> <u>lactis</u> ssp. <u>lactis</u> DN221	DSM 11034
<u>Lactococcus</u> <u>lactis</u> ssp. <u>lactis</u> DN220	DSM 11033

and our invoice No. 602 429.

Sincerely yours,

DSMZ-Deutsche Sammlung von Mikro-
organismen und Zellkulturen GmbH

V. Weihs

Dr. Vera Weihs

Further notes: After preservation of the strains you will receive samples for identity checking.

Geschäftsführer:
Prof. Dr. Eriko Slackebrandt

Aufsichtsratsvorsitzender:
MD Dr. Christian Hodder

Bankkonten:
NORD/LB Braunschweig, Kto.-Nr. 2 039 220 (BLZ 250 500 00)
SWIFT: NOLADE 214

Postbank Hannover, Kto.-Nr. 1060 79 - 304 (BLZ 250 100 30)

Registergericht:
Amtsgericht Braunschweig
HRB 2570

DSMZ - Mascheroder Weg 1b
D-38124 Braunschweig
Telefon: 05 31 / 26 16 - 0
Telefax: 05 31 / 26 16 - 416
E-mail: dsmz@gbf-braunschweig.de

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

Chr. Hansen A/S
Boge Allé 10-12

DK-2970 Horsholm

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT
issued pursuant to Rule 7.1 by the
INTERNATIONAL DEPOSITORY AUTHORITY
identified at the bottom of this page

I. IDENTIFICATION OF THE MICROORGANISM	
Identification reference given by the DEPOSITOR: DN220	Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11033
II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION	
<p>The microorganism identified under I. above was accompanied by:</p> <p><input type="checkbox"/> a scientific description <input checked="" type="checkbox"/> a proposed taxonomic designation</p> <p>(Mark with a cross where applicable).</p>	
III. RECEIPT AND ACCEPTANCE	
<p>This International Depository Authority accepts the microorganism identified under I. above, which was received by it on 1996-06-26 (Date of the original deposit)¹.</p>	
IV. RECEIPT OF REQUEST FOR CONVERSION	
<p>The microorganism identified under I above was received by this International Depository Authority on (date of original deposit) and a request to convert the original deposit to a deposit under the Budapest Treaty was received by it on (date of receipt of request for conversion).</p>	
V. INTERNATIONAL DEPOSITORY AUTHORITY	
<p>Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH</p> <p>Address: Mascheroder Weg 1b D-38124 Braunschweig</p>	<p>Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s): <i>O. Weis</i> Date: 1996-07-01</p>

¹ Where Rule 6.4 (d) applies, such date is the date on which the status of international depositary authority was acquired.

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INTERNATIONAL FORM

Chr. Hansen A/S
Bogé Allé 10-12

DK-2970 Horsholm

VIABILITY STATEMENT
issued pursuant to Rule 10.2 by the
INTERNATIONAL DEPOSITORY AUTHORITY
identified at the bottom of this page

I. DEPOSITOR		II. IDENTIFICATION OF THE MICROORGANISM
Name: Chr. Hansen A/S Bogé Allé 10-12 Address: DK-2970 Horsholm		Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11033 Date of the deposit or the transfer ¹ : 1996-06-26
III. VIABILITY STATEMENT		
The viability of the microorganism identified under II above was tested on 1996-06-26. On that date, the said microorganism was <input checked="" type="checkbox"/> ² viable <input type="checkbox"/> ³ no longer viable		
IV. CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED⁴		
V. INTERNATIONAL DEPOSITORY AUTHORITY		
Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH Address: Mascheroder Weg 1b D-38124 Braunschweig		Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s):  Date: 1996-07-01

- ¹ Indicate the date of original deposit or, where a new deposit or a transfer has been made, the most recent relevant date (date of the new deposit or date of the transfer).
- ² In the cases referred to in Rule 10.2(a) (ii) and (iii), refer to the most recent viability test.
- ³ Mark with a cross the applicable box.
- ⁴ Fill in if the information has been requested and if the results of the test were negative.

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I. IDENTIFICATION OF THE MICROORGANISM

Identification reference given by the DEPOSITOR:

DN221

Accession number given by the
INTERNATIONAL DEPOSITORY AUTHORITY:

DSM 11034

II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION

The microorganism identified under I. above was accompanied by:

a scientific description
 a proposed taxonomic designation

(Mark with a cross where applicable).

III. RECEIPT AND ACCEPTANCE

This International Depository Authority accepts the microorganism identified under I. above, which was received by it on 1996-06-26
(Date of the original deposit).

IV. RECEIPT OF REQUEST FOR CONVERSION

The microorganism identified under I. above was received by this International Depository Authority on (date of original deposit) and a request to convert the original deposit to a deposit under the Budapest Treaty was received by it on (date of receipt of request for conversion).

V. INTERNATIONAL DEPOSITORY AUTHORITY

Name: DSMZ-DEUTSCHE SAMMLUNG VON
MIKROORGANISMEN UND ZELLKULTUREN GmbH

 Address: Mascheroder Weg 1b
D-38124 Braunschweig

Signature(s) of person(s) having the power to represent the
International Depository Authority or of authorized official(s):*J. Waters*

Date: 1996-07-01

¹ Where Rule 6.4 (d) applies, such date is the date on which the status of international depository authority was acquired.

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I. DEPOSITOR	II. IDENTIFICATION OF THE MICROORGANISM
Name: Chr. Hansen A/S Boge Allé 10-12 Address: DK-2970 Horsholm	Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11034 Date of the deposit or the transfer: 1996-06-26
III. VIABILITY STATEMENT	
<p>The viability of the microorganism identified under II above was tested on 1996-06-26. On that date, the said microorganism was</p> <p><input checked="" type="checkbox"/>³ viable <input type="checkbox"/>⁴ no longer viable</p>	
IV. CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED⁴	
V. INTERNATIONAL DEPOSITORY AUTHORITY	
Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH Address: Mascheroder Weg 1b D-38124 Braunschweig	Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s):  Date: 1996-07-01

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³ Mark with a cross the applicable box.

⁴ Fill in if the information has been requested and if the results of the test were negative.

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I. IDENTIFICATION OF THE MICROORGANISM

Identification reference given by the DEPOSITOR:

DN222

Accession number given by the
INTERNATIONAL DEPOSITORY AUTHORITY:

DSM 11035

II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION

The microorganism identified under I. above was accompanied by:

a scientific description
 a proposed taxonomic designation

(Mark with a cross where applicable).

III. RECEIPT AND ACCEPTANCE

This International Depository Authority accepts the microorganism identified under I. above, which was received by it on 1996-06-26
(Date of the original deposit).

IV. RECEIPT OF REQUEST FOR CONVERSION

The microorganism identified under I above was received by this International Depository Authority on (date of original deposit)
and a request to convert the original deposit to a deposit under the Budapest Treaty was received by it on (date of receipt of request
for conversion).

V. INTERNATIONAL DEPOSITORY AUTHORITY

Name: DSMZ-DEUTSCHE SAMMLUNG VON
MIKROORGANISMEN UND ZELLKULTUREN GmbH

 Address: Mäschroder Weg 1b
D-38124 Braunschweig

Signature(s) of person(s) having the power to represent the
International Depository Authority or of authorized official(s):*J. Weiske*

Date: 1996-07-01

¹ Where Rule 6.4 (d) applies, such date is the date on which the status of international depositary authority was acquired.

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I. DEPOSITOR	II. IDENTIFICATION OF THE MICROORGANISM
Name: Chr. Hansen A/S Boge Allé 10-12 Address: DK-2970 Horsholm	Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11035 Date of the deposit or the transfer: 1996-06-26
III. VIABILITY STATEMENT	
<p>The viability of the microorganism identified under II above was tested on 1996-06-26². On that date, the said microorganism was</p> <p><input checked="" type="checkbox"/>¹ viable <input type="checkbox"/>¹ no longer viable</p>	
IV. CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED ⁴	
V. INTERNATIONAL DEPOSITORY AUTHORITY	
Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH Address: Mascheroder Weg 1b D-38124 Braunschweig	Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s): <i>U. Wates</i> Date: 1996-07-01

¹ Indicate the date of original deposit or, where a new deposit or a transfer has been made, the most recent relevant date (date of the new deposit or date of the transfer).

² In the cases referred to in Rule 10.2(a) (ii) and (iii), refer to the most recent viability test.

³ Mark with a cross the applicable box.

⁴ Fill in if the information has been requested and if the results of the test were negative.

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INTERNATIONAL FORM

Chr. Hansen A/S
Boge Allé 10-12

DK-2970 Horsholm

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT
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INTERNATIONAL DEPOSITORY AUTHORITY
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I. IDENTIFICATION OF THE MICROORGANISM

Identification reference given by the DEPOSITOR:

DN223

Accession number given by the
INTERNATIONAL DEPOSITORY AUTHORITY:

DSM 11036

II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION

The microorganism identified under I. above was accompanied by:

() a scientific description
() a proposed taxonomic designation

(Mark with a cross where applicable).

III. RECEIPT AND ACCEPTANCE

This International Depository Authority accepts the microorganism identified under I. above, which was received by it on 1996-06-26
(Date of the original deposit)¹.

IV. RECEIPT OF REQUEST FOR CONVERSION

The microorganism identified under I. above was received by this International Depository Authority on (date of original deposit)
and a request to convert the original deposit to a deposit under the Budapest Treaty was received by it on (date of receipt of request
for conversion).

V. INTERNATIONAL DEPOSITORY AUTHORITY

Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH Address: Mascheroder Weg 1b D-38124 Braunschweig	Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s):  Date: 1996-07-01
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Name: Chr. Hansen A/S Boge Allé 10-12 Address: DK-2970 Horsholm		Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11036 Date of the deposit or the transfer: 1996-06-26
III. VIABILITY STATEMENT		
The viability of the microorganism identified under II above was tested on 1996-06-26. On that date, the said microorganism was <input checked="" type="checkbox"/> ¹ viable <input type="checkbox"/> ² no longer viable		
IV. CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED ³		
V. INTERNATIONAL DEPOSITORY AUTHORITY		
Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH Address: Mascheroder Weg 1b D-38124 Braunschweig		Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s):  Date: 1996-07-01

¹ Indicate the date of original deposit or, where a new deposit or a transfer has been made, the most recent relevant date (date of the new deposit or date of the transfer).

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³ Mark with a cross the applicable box.

⁴ Fill in if the information has been requested and if the results of the test were negative.

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I. IDENTIFICATION OF THE MICROORGANISM	
Identification reference given by the DEPOSITOR: DN224	Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11037
II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION	
<p>The microorganism identified under I. above was accompanied by:</p> <p><input type="checkbox"/> a scientific description <input checked="" type="checkbox"/> a proposed taxonomic designation</p> <p>(Mark with a cross where applicable).</p>	
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V. INTERNATIONAL DEPOSITORY AUTHORITY	
Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH	Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s): <i>U. Webs</i> Date: 1996-07-01
Address: Mascheroder Weg 1b D-38124 Braunschweig	

¹ Where Rule 6.4 (d) applies, such date is the date on which the status of international depository authority was acquired.

BUDAPEST TREATY ON THE INTERNATIONAL
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Boge Allé 10-12

DK-2970 Horsholm

VIABILITY STATEMENT
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INTERNATIONAL DEPOSITORY AUTHORITY
identified at the bottom of this page

I. DEPOSITOR	II. IDENTIFICATION OF THE MICROORGANISM
Name: Chr. Hansen A/S Boge Allé 10-12 Address: DK-2970 Horsholm	Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11037 Date of the deposit or the transfer ¹ : 1996-06-26
III. VIABILITY STATEMENT	
<p>The viability of the microorganism identified under II above was tested on 1996-06-26. On that date, the said microorganism was</p> <p><input checked="" type="checkbox"/>² viable <input type="checkbox"/>³ no longer viable</p>	
IV. CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED ⁴	
V. INTERNATIONAL DEPOSITORY AUTHORITY	
Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH Address: Mascheroder Weg 1b D-38124 Braunschweig	Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s): <i>O. Weiles</i> Date: 1996-07-01

¹ Indicate the date of original deposit or, where a new deposit or a transfer has been made, the most recent relevant date (date of the new deposit or date of the transfer).

² In the cases referred to in Rule 10.2(a) (ii) and (iii), refer to the most recent viability test.

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identified at the bottom of this page

I. IDENTIFICATION OF THE MICROORGANISM

Identification reference given by the DEPOSITOR:

DN225

Accession number given by the
INTERNATIONAL DEPOSITORY AUTHORITY:

DSM 11038

II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION

The microorganism identified under I. above was accompanied by:

() a scientific description
 (X) a proposed taxonomic designation

(Mark with a cross where applicable).

III. RECEIPT AND ACCEPTANCE

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(Date of the original deposit)¹.

IV. RECEIPT OF REQUEST FOR CONVERSION

The microorganism identified under I above was received by this International Depository Authority on (date of original deposit) and a request to convert the original deposit to a deposit under the Budapest Treaty was received by it on (date of receipt of request for conversion).

V. INTERNATIONAL DEPOSITORY AUTHORITY

Name: DSMZ-DEUTSCHE SAMMLUNG VON
MIKROORGANISMEN UND ZELLKULTUREN GmbH

Address: Mascheroder Weg 1b
D-38124 Braunschweig

Signature(s) of person(s) having the power to represent the
International Depository Authority or of authorized official(s):

Date: 1996-07-01

¹ Where Rule 6.4 (d) applies, such date is the date on which the status of international depositary authority was acquired

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

Chr. Hansen A/S
Boge Allé 10-12

DK-2970 Horsholm

VIABILITY STATEMENT

issued pursuant to Rule 10.2 by the
INTERNATIONAL DEPOSITORY AUTHORITY
identified at the bottom of this page

I. DEPOSITOR	II. IDENTIFICATION OF THE MICROORGANISM
Name: Chr. Hansen A/S Boge Allé 10-12 Address: DK-2970 Horsholm	Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11038 Date of the deposit or the transfer ¹ : 1996-06-26
III. VIABILITY STATEMENT	
<p>The viability of the microorganism identified under II above was tested on 1996-06-26. On that date, the said microorganism was</p> <p><input checked="" type="checkbox"/>² viable <input type="checkbox"/>³ no longer viable</p>	
IV. CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED ⁴	
V. INTERNATIONAL DEPOSITORY AUTHORITY	
Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH Address: Mascheroder Weg 1b D-38124 Braunschweig	Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s):  Date: 1996-07-01

¹ Indicate the date of original deposit or, where a new deposit or a transfer has been made, the most recent relevant date (date of the new deposit or date of the transfer).

² In the cases referred to in Rule 10.2(a) (ii) and (iii), refer to the most recent viability test.

³ Mark with a cross the applicable box.

⁴ Fill in if the information has been requested and if the results of the test were negative.

**BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE**

INTERNATIONAL FORM

Chr. Hansen A/S
Boge Allé 10-12

DK-2970 Horsholm

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT
issued pursuant to Rule 7.1 by the
INTERNATIONAL DEPOSITORY AUTHORITY
identified at the bottom of this page

I. IDENTIFICATION OF THE MICROORGANISM

Identification reference given by the DEPOSITOR:

DN226

Accession number given by the
INTERNATIONAL DEPOSITORY AUTHORITY:

DSM 11039

II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION

The microorganism identified under I. above was accompanied by:

() a scientific description
 (X) a proposed taxonomic designation

(Mark with a cross where applicable).

III. RECEIPT AND ACCEPTANCE

This International Depository Authority accepts the microorganism identified under I. above, which was received by it on 1996-06-26
(Date of the original deposit)¹.

IV. RECEIPT OF REQUEST FOR CONVERSION

The microorganism identified under I. above was received by this International Depository Authority on (date of original deposit)
and a request to convert the original deposit to a deposit under the Budapest Treaty was received by it on (date of receipt of request
for conversion).

V. INTERNATIONAL DEPOSITORY AUTHORITY

Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH Address: Mascheroder Weg 1b D-38124 Braunschweig	Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s):  Date: 1996-07-01
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¹ Where Rule 6.4 (d) applies, such date is the date on which the status of international depositary authority was acquired.

BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

Chr. Hansen A/S
Boge Allé 10-12

DK-2970 Horsholm

VIABILITY STATEMENT

issued pursuant to Rule 10.2 by the
INTERNATIONAL DEPOSITORY AUTHORITY
identified at the bottom of this page

I. DEPOSITOR	II. IDENTIFICATION OF THE MICROORGANISM
Name: Chr. Hansen A/S Boge Allé 10-12 Address: DK-2970 Horsholm	Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11039 Date of the deposit or the transfer: 1996-06-26
III. VIABILITY STATEMENT	
<p>The viability of the microorganism identified under II above was tested on 1996-06-26. On that date, the said microorganism was</p> <p><input checked="" type="checkbox"/>² viable <input type="checkbox"/>¹ no longer viable</p>	
IV. CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED ³	
V. INTERNATIONAL DEPOSITORY AUTHORITY	
Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH Address: Mascheroder Weg 1b D-38124 Braunschweig	Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s): <i>U. Warts</i> Date: 1996-07-01

¹ Indicate the date of original deposit or, where a new deposit or a transfer has been made, the most recent relevant date (date of the new deposit or date of the transfer).

² In the cases referred to in Rule 10.2(a) (ii) and (iii), refer to the most recent viability test.

³ Mark with a cross the applicable box.

⁴ Fill in if the information has been requested and if the results of the test were negative.

**BUDAPEST TREATY ON THE INTERNATIONAL
RECOGNITION OF THE DEPOSIT OF MICROORGANISMS
FOR THE PURPOSES OF PATENT PROCEDURE**

INTERNATIONAL FORM

Chr. Hansen A/S
Boge Allé 10-12

DK-2970 Horsholm

VIABILITY STATEMENT

issued pursuant to Rule 10.2 by the
INTERNATIONAL DEPOSITORY AUTHORITY
identified at the bottom of this page

I. DEPOSITOR	II. IDENTIFICATION OF THE MICROORGANISM
<p>Name: Chr. Hansen A/S Boge Allé 10-12</p> <p>Address: DK-2970 Horsholm</p>	<p>Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY: DSM 11040</p> <p>Date of the deposit or the transfer¹: 1996-06-26</p>
<p>III. VIABILITY STATEMENT</p> <p>The viability of the microorganism identified under II above was tested on 1996-06-26. On that date, the said microorganism was</p> <p><input checked="" type="checkbox"/> ² viable <input type="checkbox"/> ³ no longer viable</p>	
<p>IV. CONDITIONS UNDER WHICH THE VIABILITY TEST HAS BEEN PERFORMED⁴</p> <p>(This section is left blank in the original document)</p>	
<p>V. INTERNATIONAL DEPOSITORY AUTHORITY</p> <p>Name: DSMZ-DEUTSCHE SAMMLUNG VON MIKROORGANISMEN UND ZELLKULTUREN GmbH</p> <p>Address: Mascheroder Weg 1b D-38124 Braunschweig</p> <p>Signature(s) of person(s) having the power to represent the International Depository Authority or of authorized official(s): <i>V. Wezes</i></p> <p>Date: 1996-07-01</p>	

¹ Indicate the date of original deposit or, where a new deposit or a transfer has been made, the most recent relevant date (date of the new deposit or date of the transfer).

² In the cases referred to in Rule 10.2(a) (ii) and (iii), refer to the most recent viability test.

³ Mark with a cross the applicable box.

⁴ Fill in if the information has been requested and if the results of the test were negative.

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RMEIJER
<Ron.Meijer@nizo.nl>
Sent by: HUGENHOL
<Jeroen.Hugenholz@nizo.nl
>

To Jan Skouw/Hoersholm/DK/ChrHansen@ChrHansen
cc
bcc
Subject Re: Identity of Leuconostoc sp. 60 (our ref.: P10011US02)

06-10-2005 12:13

Dear Mr. Skouw,

The Leuconostoc sp. 60, that we have studied in our work on citrate metabolism, was characterised, by molecular typing (16S-RNA sequencing), as a Leuconostoc lactis in 2002. I hope this answers your question.

Yours sincerely,

Jeroen Hugenholz